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Senate Engrossed House Bill

State of Arizona
House of Representatives
Forty-seventh Legislature
First Regular Session
2005

HOUSE BILL 2390

AN ACT

AMENDING TITLE 44, CHAPTER 9, ARIZONA REVISED STATUTES, BY ADDING ARTICLE 19;
RELATING TO APPLIANCE AND EQUIPMENT ENERGY EFFICIENCY STANDARDS.

(TEXT OF BILL BEGINS ON NEXT PAGE)

1 Be it enacted by the Legislature of the State of Arizona:

2 Section 1. Title 44, chapter 9, Arizona Revised Statutes, is amended
3 by adding article 19, to read:

4 ARTICLE 19. APPLIANCES AND EQUIPMENT
5 ENERGY EFFICIENCY STANDARDS

6 44-1375. Definitions

7 IN THIS ARTICLE, UNLESS THE CONTEXT OTHERWISE REQUIRES:

8 1. "AUTOMATIC COMMERCIAL ICEMAKER" MEANS A FACTORY MADE ASSEMBLY THAT
9 IS SHIPPED IN ONE OR MORE PACKAGES, THAT CONSISTS OF A CONDENSING UNIT AND
10 ICEMAKING SECTION OPERATING AS AN INTEGRATED UNIT, THAT MAKES AND HARVESTS
11 ICE CUBES AND THAT MAY STORE OR DISPENSE ICE. AUTOMATIC COMMERCIAL ICEMAKER
12 INCLUDES MACHINES WITH CAPACITIES BETWEEN FIFTY AND TWO THOUSAND FIVE HUNDRED
13 POUNDS PER TWENTY-FOUR HOURS.

14 2. "BALLAST" MEANS A DEVICE USED WITH AN ELECTRIC DISCHARGE LAMP TO
15 OBTAIN NECESSARY CIRCUIT CONDITIONS SUCH AS VOLTAGE, CURRENT AND WAVEFORM FOR
16 STARTING AND OPERATING THE LAMP.

17 3. "COMMERCIAL CLOTHES WASHER" MEANS A SOFT MOUNT HORIZONTAL OR
18 VERTICAL AXIS CLOTHES WASHER THAT BOTH:

19 (a) HAS A CLOTHES CONTAINER COMPARTMENT NO GREATER THAN THREE AND
20 ONE-HALF CUBIC FEET IN THE CASE OF A HORIZONTAL AXIS PRODUCT OR NO GREATER
21 THAN FOUR CUBIC FEET IN THE CASE OF A VERTICAL AXIS PRODUCT.

22 (b) IS DESIGNED FOR USE BY MORE THAN ONE HOUSEHOLD, SUCH AS IN
23 MULTIFAMILY HOUSING, APARTMENTS OR COIN LAUNDRIES.

24 4. "COMMERCIAL PRERINSE SPRAY VALVE" MEANS A HANDHELD DEVICE DESIGNED
25 TO SPRAY WATER ON DISHES, FLATWARE AND OTHER FOOD SERVICE ITEMS FOR THE
26 PURPOSE OF REMOVING FOOD RESIDUE PRIOR TO CLEANING.

27 5. "COMMERCIAL REFRIGERATOR, FREEZER AND REFRIGERATOR FREEZER" MEANS
28 SELF-CONTAINED REFRIGERATION EQUIPMENT THAT:

29 (a) IS NOT A CONSUMER PRODUCT AS REGULATED PURSUANT TO 42 UNITED
30 STATES CODE CHAPTER 77.

31 (b) OPERATES AT A CHILLED, FROZEN, COMBINATION CHILLED-FROZEN OR
32 VARIABLE TEMPERATURE FOR THE PURPOSE OF STORING OR MERCHANDISING FOOD,
33 BEVERAGES OR ICE.

34 (c) MAY HAVE TRANSPARENT OR SOLID OR BOTH TRANSPARENT AND SOLID HINGED
35 DOORS, SLIDING DOORS OR A COMBINATION OF HINGED AND SLIDING DOORS.

36 (d) INCORPORATES MOST COMPONENTS INVOLVED IN THE VAPOR-COMPRESSION
37 CYCLE AND THE REFRIGERATED COMPARTMENT IN A SINGLE CABINET.

38 (e) DOES NOT INCLUDE:

39 (i) UNITS WITH EIGHTY-FIVE CUBIC FEET OR MORE OF INTERNAL VOLUME.

40 (ii) WALK-IN REFRIGERATORS OR FREEZERS.

41 (iii) UNITS WITH NO DOORS.

42 (iv) FREEZERS SPECIFICALLY DESIGNED FOR ICE CREAM.

43 6. "HIGH-INTENSITY DISCHARGE LAMP" MEANS A LAMP IN WHICH LIGHT IS
44 PRODUCED BY THE PASSAGE OF AN ELECTRIC CURRENT THROUGH A VAPOR OR GAS AND IN
45 WHICH THE LIGHT PRODUCING ARC IS STABILIZED BY BULB WALL TEMPERATURE AND THE

1 ARC TUBE HAS A BULB WALL LOADING IN EXCESS OF THREE WATTS PER SQUARE
2 CENTIMETER.

3 7. "ILLUMINATED EXIT SIGN" MEANS AN INTERNALLY ILLUMINATED SIGN THAT
4 IS DESIGNED TO BE PERMANENTLY FIXED IN PLACE TO IDENTIFY A BUILDING EXIT AND
5 THAT CONSISTS OF AN ELECTRICALLY POWERED INTEGRAL LIGHT SOURCE THAT BOTH
6 ILLUMINATES THE LEGEND "EXIT" AND ANY DIRECTIONAL INDICATORS AND PROVIDES
7 CONTRAST BETWEEN THE LEGEND, ANY DIRECTIONAL INDICATORS AND THE BACKGROUND.

8 8. "LARGE PACKAGED AIR CONDITIONING EQUIPMENT" MEANS ELECTRICALLY
9 OPERATED, AIR COOLED AIR CONDITIONING AND AIR CONDITIONING HEAT PUMP
10 EQUIPMENT THAT HAS COOLING CAPACITY GREATER THAN OR EQUAL TO TWO HUNDRED
11 FORTY THOUSAND BTU PER HOUR BUT LESS THAN SEVEN HUNDRED SIXTY THOUSAND BTU
12 PER HOUR AND THAT IS BUILT AS A PACKAGE AND SHIPPED AS A WHOLE TO END USER
13 SITES.

14 9. "LOW VOLTAGE DRY TYPE DISTRIBUTION TRANSFORMER" MEANS A TRANSFORMER
15 TO WHICH ALL OF THE FOLLOWING APPLY:

- 16 (a) HAS AN INPUT VOLTAGE OF SIX HUNDRED VOLTS OR LESS.
- 17 (b) IS AIR COOLED.
- 18 (c) DOES NOT USE OIL AS A COOLANT.
- 19 (d) IS RATED FOR OPERATION AT A FREQUENCY OF SIXTY HERTZ.

20 10. "METAL HALIDE LAMP" MEANS A HIGH INTENSITY DISCHARGE LAMP IN WHICH
21 THE MAJOR PORTION OF THE LIGHT IS PRODUCED BY RADIATION OF METAL HALIDES AND
22 THEIR PRODUCTS OF DISSOCIATION, POSSIBLY IN COMBINATION WITH METALLIC VAPORS.

23 11. "METAL HALIDE LAMP FIXTURE" MEANS A LIGHT FIXTURE DESIGNED TO BE
24 OPERATED WITH A METAL HALIDE LAMP AND A BALLAST FOR A METAL HALIDE LAMP.

25 12. "PROBE START METAL HALIDE BALLAST" MEANS A BALLAST USED TO OPERATE
26 METAL HALIDE LAMPS THAT DOES NOT CONTAIN AN IGNITOR AND WHICH INSTEAD STARTS
27 LAMPS BY USING A THIRD STARTING ELECTRODE PROBE IN THE ARC TUBE.

28 13. "PULLDOWN REFRIGERATOR" MEANS A COMMERCIAL REFRIGERATOR
29 SPECIFICALLY DESIGNED TO RAPIDLY REDUCE ALL INTEGRATED PRODUCT TEMPERATURES
30 FROM NINETY DEGREES FAHRENHEIT TO THIRTY-EIGHT DEGREES FAHRENHEIT OVER A
31 TWELVE HOUR PERIOD WHEN FULLY LOADED WITH BEVERAGE CONTAINERS.

32 14. "SINGLE VOLTAGE EXTERNAL AC TO DC POWER SUPPLY" MEANS A DEVICE
33 THAT:

- 34 (a) IS DESIGNED TO CONVERT LINE VOLTAGE AC INPUT INTO LOWER VOLTAGE DC
35 OUTPUT.
- 36 (b) IS ABLE TO CONVERT TO ONLY ONE DC OUTPUT VOLTAGE AT A TIME.
- 37 (c) IS SOLD WITH, OR INTENDED TO BE USED WITH, A SEPARATE END USE
38 PRODUCT THAT CONSTITUTES THE PRIMARY POWER LOAD.
- 39 (d) IS CONTAINED WITHIN A SEPARATE PHYSICAL ENCLOSURE FROM THE END USE
40 PRODUCT.
- 41 (e) IS CONNECTED TO THE END USE PRODUCT VIA A REMOVABLE OR HARD WIRED
42 MALE/FEMALE ELECTRICAL CONNECTION, CABLE, CORD OR OTHER WIRING.
- 43 (f) DOES NOT HAVE BATTERIES OR BATTERY PACKS, INCLUDING THOSE THAT ARE
44 REMOVABLE AND THAT PHYSICALLY ATTACH DIRECTLY TO THE POWER SUPPLY UNIT.

1 (g) DOES NOT HAVE A BATTERY CHEMISTRY OR TYPE SELECTOR SWITCH AND
2 INDICATOR LIGHT OR DOES NOT HAVE A BATTERY CHEMISTRY OR TYPE SELECTOR SWITCH
3 AND A STATE OF CHARGE METER.

4 (h) HAS A NAMEPLATE OUTPUT POWER LESS THAN OR EQUAL TO TWO HUNDRED
5 FIFTY WATTS.

6 15. "TORCHIERE" MEANS A PORTABLE ELECTRIC LIGHTING FIXTURE WITH A
7 REFLECTIVE BOWL THAT DIRECTS LIGHT UPWARD ONTO A CEILING SO AS TO PRODUCE
8 INDIRECT ILLUMINATION ON THE SURFACES BELOW. A TORCHIERE MAY INCLUDE
9 DOWNWARD DIRECTED LAMPS IN ADDITION TO THE UPWARD, INDIRECT ILLUMINATION.

10 16. "TRAFFIC SIGNAL MODULE" MEANS A STANDARD EIGHT INCH OR TWELVE INCH
11 TRAFFIC SIGNAL INDICATION, CONSISTING OF A LIGHT SOURCE, A LENS AND ALL OTHER
12 PARTS NECESSARY FOR OPERATION.

13 17. "TRANSFORMER" MEANS A DEVICE THAT CONSISTS OF TWO OR MORE COILS OF
14 INSULATED WIRE AND THAT IS DESIGNED TO TRANSFER ALTERNATING CURRENT BY
15 ELECTROMAGNETIC INDUCTION FROM ONE COIL TO ANOTHER TO CHANGE THE ORIGINAL
16 VOLTAGE OR CURRENT VALUE. TRANSFORMER DOES NOT INCLUDE:

17 (a) TRANSFORMERS WITH MULTIPLE VOLTAGE TAPS, WITH THE HIGHEST VOLTAGE
18 TAP EQUALING AT LEAST TWENTY PER CENT MORE THAN THE LOWEST VOLTAGE TAP.

19 (b) TRANSFORMERS, SUCH AS THOSE COMMONLY KNOWN AS DRIVE TRANSFORMERS,
20 RECTIFIER TRANSFORMERS, AUTO TRANSFORMERS, UNINTERRUPTIBLE POWER SYSTEM
21 TRANSFORMERS, IMPEDANCE TRANSFORMERS, REGULATING TRANSFORMERS, SEALED AND
22 NONVENTILATING TRANSFORMERS, MACHINE TOOL TRANSFORMERS, WELDING TRANSFORMERS,
23 GROUNDING TRANSFORMERS OR TESTING TRANSFORMERS, THAT ARE DESIGNED TO BE USED
24 IN A SPECIAL PURPOSE APPLICATION AND THAT ARE UNLIKELY TO BE USED IN GENERAL
25 PURPOSE APPLICATIONS.

26 18. "UNIT HEATER" MEANS A SELF-CONTAINED, VENTED FAN TYPE COMMERCIAL
27 SPACE HEATER THAT USES NATURAL GAS OR PROPANE AND THAT IS DESIGNED TO BE
28 INSTALLED WITHOUT DUCTS WITHIN A HEATED SPACE, EXCEPT THAT UNIT HEATER DOES
29 NOT INCLUDE ANY PRODUCTS COVERED BY FEDERAL STANDARDS ESTABLISHED PURSUANT TO
30 42 UNITED STATES CODE CHAPTER 77 OR ANY PRODUCT THAT IS A DIRECT VENT, FORCED
31 FLUE HEATER WITH A SEALED COMBUSTION BURNER.

32 44-1375.01. Applicability

33 A. THIS ARTICLE APPLIES TO THE FOLLOWING TYPES OF NEW PRODUCTS SOLD,
34 OFFERED FOR SALE OR INSTALLED IN THIS STATE:

- 35 1. AUTOMATIC COMMERCIAL ICE MAKERS.
- 36 2. COMMERCIAL CLOTHES WASHERS.
- 37 3. COMMERCIAL PRERINSE SPRAY VALVES.
- 38 4. COMMERCIAL REFRIGERATORS, FREEZERS AND REFRIGERATOR FREEZERS.
- 39 5. ILLUMINATED EXIT SIGNS.
- 40 6. LARGE PACKAGED AIR CONDITIONING EQUIPMENT.
- 41 7. LOW VOLTAGE DRY TYPE DISTRIBUTION TRANSFORMERS.
- 42 8. METAL HALIDE LAMP FIXTURES.
- 43 9. SINGLE VOLTAGE EXTERNAL AC TO DC POWER SUPPLIES.
- 44 10. TORCHIERES.
- 45 11. TRAFFIC SIGNAL MODULES.
- 46 12. UNIT HEATERS.

- 1 B. THIS ARTICLE DOES NOT APPLY TO:
- 2 1. NEW PRODUCTS MANUFACTURED IN THIS STATE AND SOLD OUTSIDE THIS
- 3 STATE.
- 4 2. NEW PRODUCTS MANUFACTURED OUTSIDE THIS STATE AND SOLD AT WHOLESALE
- 5 INSIDE THIS STATE FOR FINAL RETAIL SALE AND INSTALLATION OUTSIDE THIS STATE.
- 6 3. PRODUCTS INSTALLED IN MOBILE MANUFACTURED HOMES AT THE TIME OF
- 7 CONSTRUCTION.
- 8 4. PRODUCTS DESIGNED EXPRESSLY FOR INSTALLATION AND USE IN
- 9 RECREATIONAL VEHICLES.
- 10 5. PRODUCTS INSTALLED IN A LAUNDRY FACILITY LOCATED WITHIN AN
- 11 APARTMENT COMPLEX OR MOBILE HOME PARK AT THE TIME OF CONSTRUCTION OR
- 12 REPLACEMENT. FOR THE PURPOSES OF THIS PARAGRAPH, "APARTMENT COMPLEX" MEANS
- 13 ANY REAL PROPERTY THAT HAS ONE OR MORE STRUCTURES AND THAT CONTAINS FOUR OR
- 14 MORE DWELLING UNITS FOR RENT OR LEASE THAT ARE SUBJECT TO THE ARIZONA
- 15 RESIDENTIAL LANDLORD AND TENANT ACT PRESCRIBED BY TITLE 33, CHAPTER 10.
- 16 44-1375.02. Standards
- 17 A. EXCEPT AS PROVIDED IN SUBSECTION B, THE FOLLOWING STANDARDS APPLY
- 18 BEGINNING JANUARY 1, 2008:
- 19 1. AUTOMATIC COMMERCIAL ICEMAKERS SHALL MEET THE REQUIREMENTS OF
- 20 SECTION 1605.3 OF THE CALIFORNIA CODE OF REGULATIONS, TITLE 20: DIVISION 2,
- 21 CHAPTER 4, ARTICLE 4, IN EFFECT ON THE EFFECTIVE DATE OF THIS ARTICLE.
- 22 2. COMMERCIAL CLOTHES WASHERS SHALL MEET THE REQUIREMENTS OF SECTION
- 23 1605.3 OF THE CALIFORNIA CODE OF REGULATIONS, TITLE 20: DIVISION 2, CHAPTER
- 24 4, ARTICLE 4, IN EFFECT ON THE EFFECTIVE DATE OF THIS ARTICLE.
- 25 3. COMMERCIAL PRERINSE SPRAY VALVES SHALL HAVE A FLOW RATE EQUAL TO OR
- 26 LESS THAN 1.6 GALLONS PER MINUTE.
- 27 4. COMMERCIAL REFRIGERATORS, FREEZERS AND REFRIGERATOR FREEZERS SHALL
- 28 MEET THE REQUIREMENTS OF SECTION 1605.3 OF THE CALIFORNIA CODE OF
- 29 REGULATIONS, TITLE 20: DIVISION 2, CHAPTER 4, ARTICLE 4, IN EFFECT ON THE
- 30 EFFECTIVE DATE OF THIS ARTICLE, EXCEPT THAT PULLDOWN REFRIGERATORS WITH
- 31 TRANSPARENT DOORS SHALL MEET A REQUIREMENT FIVE PER CENT LESS STRINGENT THAN
- 32 SHOWN IN THE CALIFORNIA REGULATIONS.
- 33 5. ILLUMINATED EXIT SIGNS SHALL HAVE AN INPUT POWER DEMAND OF FIVE
- 34 WATTS OR LESS PER ILLUMINATED FACE AND SHALL EITHER HAVE A POWER FACTOR OF AT
- 35 LEAST 0.70 OR MEET THE POWER FACTOR PRODUCT SPECIFICATION OF THE ENERGY STAR
- 36 PROGRAM REQUIREMENTS, WHICHEVER IS HIGHER.
- 37 6. LARGE PACKAGED AIR CONDITIONING EQUIPMENT SHALL MEET A MINIMUM
- 38 ENERGY EFFICIENCY RATIO OF 10.0 FOR AIR CONDITIONING WITHOUT AN INTEGRATED
- 39 HEATING COMPONENT OR WITH ELECTRIC RESISTANCE HEATING INTEGRATED INTO THE
- 40 UNIT, 9.8 FOR AIR CONDITIONING WITH HEATING OTHER THAN ELECTRIC RESISTANCE
- 41 INTEGRATED INTO THE UNIT, 9.5 FOR AIR CONDITIONING HEAT PUMPS WITHOUT AN
- 42 INTEGRATED HEATING COMPONENT OR WITH ELECTRIC RESISTANCE HEATING INTEGRATED
- 43 INTO THE UNIT AND 9.3 FOR AIR CONDITIONING HEAT PUMP EQUIPMENT WITH HEATING
- 44 OTHER THAN ELECTRIC RESISTANCE INTEGRATED INTO THE UNIT. LARGE PACKAGED AIR
- 45 CONDITIONING HEAT PUMPS SHALL MEET A MINIMUM COEFFICIENT OF PERFORMANCE IN

1 THE HEATING MODE OF 3.2 MEASURED AT A HIGH TEMPERATURE RATING OF FORTY-SEVEN
2 DEGREES FAHRENHEIT.

3 7. LOW VOLTAGE DRY TYPE DISTRIBUTION TRANSFORMERS SHALL MEET THE CLASS
4 1 EFFICIENCY LEVELS FOR LOW VOLTAGE DISTRIBUTION TRANSFORMERS SPECIFIED IN
5 TABLE 4-2 OF THE GUIDE FOR DETERMINING ENERGY EFFICIENCY FOR DISTRIBUTION
6 TRANSFORMERS, PUBLISHED BY THE NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
7 (NEMA STANDARD TP-1-2002), IN EFFECT ON THE EFFECTIVE DATE OF THIS ARTICLE.

8 8. METAL HALIDE LAMP FIXTURES DESIGNED TO BE OPERATED WITH LAMPS RATED
9 GREATER THAN OR EQUAL TO ONE HUNDRED FIFTY WATTS BUT LESS THAN OR EQUAL TO
10 FIVE HUNDRED WATTS SHALL NOT CONTAIN A PROBE START METAL HALID LAMP BALLAST.

11 9. SINGLE VOLTAGE EXTERNAL AC TO DC POWER SUPPLIES SHALL MEET THE TIER
12 ONE ENERGY EFFICIENCY REQUIREMENTS OF SECTION 1605.3 OF THE CALIFORNIA CODE
13 OF REGULATIONS, TITLE 20: DIVISION 2, CHAPTER 4, ARTICLE 4, IN EFFECT ON THE
14 EFFECTIVE DATE OF THIS ARTICLE. THIS STANDARD APPLIES TO SINGLE VOLTAGE AC
15 TO DC POWER SUPPLIES THAT ARE SOLD INDIVIDUALLY AND TO THOSE THAT ARE SOLD AS
16 A COMPONENT OF OR IN CONJUNCTION WITH ANOTHER PRODUCT.

17 10. TORCHIERES SHALL NOT USE MORE THAN ONE HUNDRED NINETY WATTS. A
18 TORCHIERE SHALL BE DEEMED TO USE MORE THAN ONE HUNDRED NINETY WATTS IF ANY
19 COMMERCIALY AVAILABLE LAMP OR COMBINATION OF LAMPS CAN BE INSERTED IN ITS
20 SOCKET AND CAUSE THE TORCHIERE TO DRAW MORE THAN ONE HUNDRED NINETY WATTS
21 WHEN OPERATED AT FULL BRIGHTNESS.

22 11. TRAFFIC SIGNAL MODULES SHALL MEET THE PRODUCT SPECIFICATION OF THE
23 ENERGY STAR PROGRAM REQUIREMENTS FOR TRAFFIC SIGNALS DEVELOPED BY THE UNITED
24 STATES ENVIRONMENTAL PROTECTION AGENCY THAT TOOK EFFECT IN FEBRUARY 2001,
25 SHALL HAVE A POWER FACTOR OF AT LEAST 0.90 AND SHALL BE INSTALLED WITH
26 COMPATIBLE, ELECTRICALLY CONNECTED SIGNAL CONTROL INTERFACE DEVICES AND
27 CONFLICT MONITORING SYSTEMS.

28 12. UNIT HEATERS SHALL BE EQUIPPED WITH AN INTERMITTENT IGNITION DEVICE
29 AND SHALL HAVE EITHER POWER VENTING OR AN AUTOMATIC FLUE DAMPER.

30 B. THE STANDARDS PRESCRIBED BY SUBSECTION A APPLY BEGINNING JANUARY 1,
31 2010, IF THE PRODUCT IS A COMMERCIAL REFRIGERATOR, FREEZER OR REFRIGERATOR
32 FREEZER OR LARGE PACKAGED AIR CONDITIONING EQUIPMENT.

33 C. BEGINNING ON MAY 31, 2008, AND EVERY THREE YEARS THEREAFTER, THE
34 DEPARTMENT OF COMMERCE ENERGY OFFICE SHALL CONDUCT A COMPARATIVE REVIEW AND
35 ASSESSMENT OF THE STANDARDS PRESCRIBED BY SUBSECTION A AND ENERGY EFFICIENCY
36 STANDARDS ADOPTED IN OTHER STATES. THE DEPARTMENT OF COMMERCE ENERGY OFFICE
37 SHALL:

38 1. SUBMIT A REPORT OF ITS FINDINGS AND RECOMMENDATIONS TO THE SPEAKER
39 OF THE HOUSE OF REPRESENTATIVES AND PRESIDENT OF THE SENATE.

40 2. PROVIDE A COPY OF THE REPORT TO THE DIRECTOR OF THE ARIZONA STATE
41 LIBRARY, ARCHIVES AND PUBLIC RECORDS.

